

# Images of Hospital Pharmacy in America

A pictorial essay in conjunction with an exhibit  
at the National Library of Medicine, May 28-July 28, 1992, to commemorate  
the 50th anniversary of the founding of the American Society of Hospital Pharmacists.



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Pharmacist Joseph I. Taylor  
at the compounding counter of the pharmacy of the Pennsylvania Hospital, about 1895.  
The first hospital pharmacy in this country was established at the Pennsylvania Hospital in 1752. (NMAH)

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The pictures are courtesy of the American Institute of the History of Pharmacy (AIHP), the American Society of Hospital Pharmacists (ASHP),  
the National Library of Medicine (NLM), and the National Museum of American History of the Smithsonian Institution (NMAH).

The first hospital in the thirteen colonies that were to form the United States was established in Philadelphia in 1751. Like the European hospitals of the day, the Pennsylvania Hospital was designed primarily to serve the poor. By late 1752, the Hospital, following the example of voluntary hospitals in the mother country of Great Britain, hired a salaried apothecary "to prepare and compound the medicines and administer them agreeable to the prescriptions of the physicians and surgeons."



John Morgan was the second apothecary (1755-56) to serve at America's first hospital pharmacy at the Pennsylvania Hospital. Morgan became a distinguished physician and advocate of the separation of medicine from pharmacy in the United States.

Thus began the history of hospital pharmacy in America.



A view of the New York Hospital in the early 19th century. The first American civilian hospital formulary was issued here in 1811. (NLM)



Dress uniform of a hospital steward (pharmacist) of the Union Army during the Civil War period. (The photograph was staged by the United States War Department in 1900.) Hospital stewards both prepared medicines and dispensed them. (NMAH)

In the colonial period, apothecaries in the hospitals were frequently called upon to perform medical as well as pharmaceutical work.

By about 1830, however, a few of the larger hospitals had relieved their apothecaries of medical duties and allowed them to specialize in pharmacy. But many hospitals did not employ a pharmacist at all. Physicians dispensed their own medicines, or orderlies or other employees were trained to prepare and dispense drugs.



Bulk medicine area, where medicines were packaged for use on the wards, at Bellevue Hospital, New York City, in the late 19th century. The eminent hospital pharmacist Charles Rice, who headed three revisions of the United States Pharmacopeia, is standing at the far right. (AIHP)



United States Air Force hospital pharmacists of the 1950s compounding prescription orders kept in 19-century style prescription books. (ASHP)



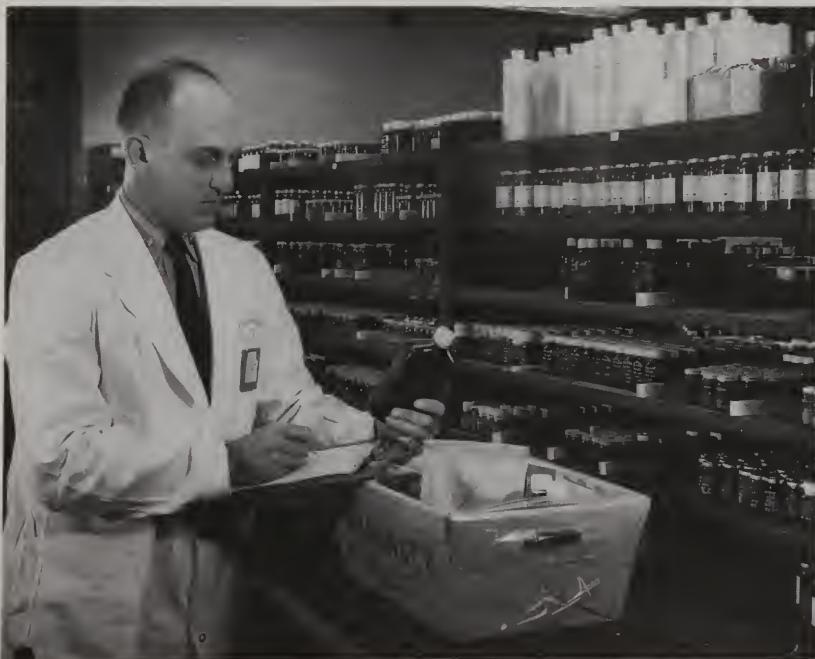
Patient presenting a prescription at the outpatient pharmacy department of the Cleveland Clinic. The telephone had become standard equipment for the pharmacy by the time that this picture was taken, probably in the 1930s. (ASHP)

American hospital pharmacists of the nineteenth century received relatively little recognition for their work, and were generally paid less than community pharmacists. The hospital pharmacist was often buried in a basement "drug room," with little opportunity for contact with patients or other health professionals. As late as 1922, one hospital pharmacist lamented in the *Bulletin of Pharmacy*: *"If you are not physically above average, do not want to act as a go-between for physician and patient, do not want to try your hand at teaching and do not want to do all kinds of odd jobs from dressing cut fingers to pulling teeth - stick to what is known as the commercial side of pharmacy. That's where the game is worthwhile."*

**B**ut working conditions for American hospital pharmacists were beginning to improve, and the article from which the quotation (from the previous page) is taken elicited responses from other hospital pharmacists who defended their choice of a career.



This "modern" entrance design of an Omaha, Nebraska hospital pharmacy of the 1950's incorporates an efficient layout that meets inservice needs and also provides for an outpatient window. (ASHP)



Pharmacist dispensing ward stock at the Clinical Center of the National Institutes of Health in 1965. Labels for the medicines have been printed directly onto the bottles. (ASHP)

A few hospital pharmacists, such as Charles Rice of Bellevue Hospital in New York, even rose to special prominence in the profession in the late nineteenth and early twentieth centuries.



Production of distilled water and the manufacture of large-volume sterile solutions were major tasks for medium and large hospital pharmacies during the 1960s. (ASHP)

The tremendous growth in the number of hospitals, and their increasingly important role in the health care system, was one of the factors that helped to strengthen hospital pharmacy as the twentieth century progressed. The movement to develop and improve standards for hospitals exerted a positive impact on hospital pharmacies. In 1936, for example, the American College of Surgeons adopted a set of minimum standards for hospital pharmacies that had been drawn up by two prominent hospital pharmacists. In that same year, the American Hospital Association formed a Committee on Pharmacy to study the operation of hospital pharmacies.



Prepackaged medicines were in common use by the 1960s, saving these two hospital pharmacists time in dispensing. (AIHP)



Hospital pharmacist consulting with a ward nurse on patient medications. The presence of the pharmacist in nursing units greatly increased after the 1960s. (AIHP)

It was estimated in the early 1960s that only about fifty per cent of American hospitals had a full-time or even a part-time pharmacist on the staff.

By the early 1970s, that figure had risen to 85 per cent. By 1975, ASHP membership stood at over 13,000.

## Conditions

in hospital pharmacies were also improved as a result of organization on the part of the practitioners of the field. In 1925, the first state association of hospital pharmacists was founded in California. In 1936, a Sub-Section on Hospital Pharmacy was created as part of the Section on Practical Pharmacy and Dispensing of the American Pharmaceutical Association. Within a few years the Sub-Section began to experience growing pains, and hospital pharmacists sought an organization of their own. The American Society of Hospital Pharmacists (ASHP) was founded in 1942.

Intravenous admixture services, originally the responsibility of the ward nurse, increasingly passed into the hands of the hospital pharmacist after 1970.



Many factors have influenced the continued growth of hospital pharmacy over the past few decades, and only a few of these can even be mentioned here. Pharmacological advances led to more powerful medications that required the pharmacist's expertise for control, distribution, and monitoring of use. Changes in the education of the pharmacist led to a greater clinical focus, particularly in hospital pharmacy, and pharmacists began to see their role in terms of ensuring appropriate use of medications. Developments such as the formulary system, drug information centers, and drug therapy monitoring by the pharmacist reflected and contributed to this changing role of the hospital pharmacist. Other innovations in hospital pharmacy include the development of the unit dose distribution system to reduce medication errors and the development of pharmacy-based intravenous admixture services (paralleled by the expanded use of injectable drugs).



Hospital pharmacist delivering to the patient's bedside the required radioisotope needed for treatment, 1970s. In 1958, the American Society of Hospital

Pharmacists recognized the increased involvement of the hospital pharmacist with radioactive isotopes by setting up guidelines for a course in isotope pharmacy. (ASHP)



Clinical pharmacy students accompany a physician on her pediatric rounds at Providence Hospital, Southfield, Michigan, 1968. (ASHP)

American hospital pharmacy has indeed come a long way from the days of the basement "drug room."

## **Hospital Pharmacists—1992**

Hospital pharmacists today can best be described as medication-use experts. They understand the chemistry of drug products. They also know how the body works. Most important, hospital pharmacists are experts in predicting how a certain medicine will affect an individual patient.

Physicians, nurses, and other members of the health-care team rely on the pharmacist for advice on medication selection, administration, and dosage levels.

### **Hospital pharmacists evaluate and select medications.**

A wide variety of medications are available today, and new products are constantly being introduced. The hospital pharmacist evaluates new products and recommends which medicines are best for the hospital to stock. The factors used by pharmacists in making these recommendations include the product's safety, effectiveness, and cost.

### **Hospital pharmacists prepare and dispense medications.**

Hospital pharmacists prepare medications and are responsible for making sure they reach the patient in the appropriate form and dose at the right time.

Working under sterile conditions in the hospital pharmacy department, they compound injectable drugs with fluids that are administered to patients intravenously. They prepare some of the powerful new compounds used to treat patients with cancer. They oversee intravenous nutrition support therapy, which has a vital role in helping the body combat illness and disease.

Hospital pharmacists also supervise the dispensing and distribution of tablets, capsules, liquids, ointments, and all other forms of medication used in the hospital.

### **Hospital pharmacists are trained health professionals.**

Hospital pharmacists are licensed health professionals with at least five years of training in a school or college of pharmacy. Many hold an advanced Doctor of Pharmacy (Pharm.D.) degree. Some have completed residency programs in hospital pharmacy or in specialty areas. Nationwide, approximately 40,000 pharmacists practice in hospitals.

### **Hospital pharmacists are patient-oriented.**

Today, many pharmacists work in satellite pharmacies throughout patient-care areas. They keep a careful eye on the safe and efficient use of drug products. They review patient charts, make recommendations concerning drug therapy, and consult on a regular basis with physicians, nurses, and other caregivers.

In some hospitals today, patients meet their pharmacists during morning rounds. In addition, the pharmacist may conduct a bedside interview, during which the patient's medication history is recorded. This gives the pharmacist a chance to explain the purpose, dosage schedule, and possible side effects of each medication. It also gives the patient a good opportunity to ask questions about the safe use of medications.

### **Hospital pharmacists provide continuing care.**

When the time for discharge from the hospital arrives, part of the pharmacist's job is to make sure the patient is ready to assume responsibility for his or her own therapy. The pharmacist supplies information about where to store medications, what to do if a dose is missed, and how to combine nonprescription medications with prescription products.

Because of their expert knowledge of new drugs and intravenous delivery systems, hospital pharmacists also play an important role in today's rapidly growing home health-care programs. Most patients prefer home care to an extended hospital stay; home care also reduces health-care costs.

Whether in a hospital, nursing home, home-care program, or other health-care setting, the pharmacist has an important role in making sure that medications are used safely and effectively.

